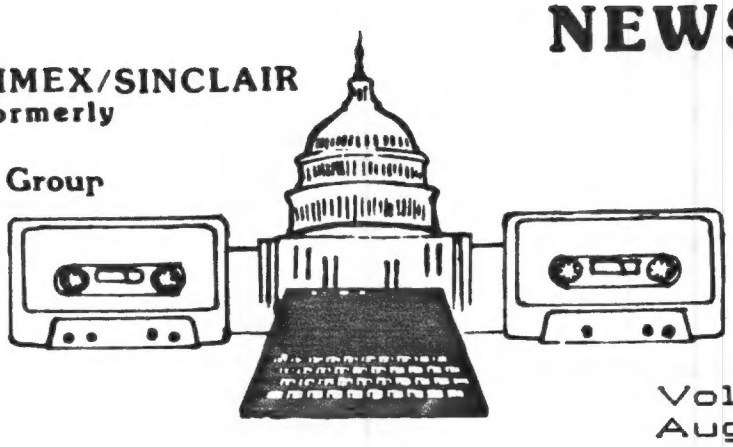
CATS NEWSLETTER

CAPITOL AREA TIMEX/SINCLAIR USERS GROUP :Formerly
Prince George's Timex/Sinclair User's Group



Vol. 2 No. 5
August, 1984

CONTENTS

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POT-LUCK DINNER/HOUSEWARMING

AT

THE FISHER'S

SEE PAGE 3 FOR DATE AND TIME

##

The July meeting brought out a nice size group in spite of the beautiful summer weather. The latest in the continuing SAGA of TIMEX is that as of July 27th noone has turned up with a successful offer to take over the TIMEX rights to the 2068.

We were very schocked to hear of the sudden death of Stewart Lotwin of WESTRIDGE COMMUNICATIONS on Monday July 16. Stewart and his crew took on the task of distributing the EX-TIMEX MODEM We extend our condolence to his family and hope they will be able to carry on in the WESTRIDGE tradition.

cont.pg 2

CATS ROSTER OF OFFICERS

President	Mark Fisher
Vice President	Mike Cohen
2nd Vice Pres.	Wayson Lee
Secretary	Bob Curnutt
Treasurer	Sarah Fisher

Newsletter Editor Jules Gesang

AD RATES APPEAR ON PAGE 5

For this issue contributors appear below.

Any suggestions for material you would like to see in future issues will be considered if you submit your suggestions to the EDITOR. The address for submissions appears below with the deadline calander.

HOW ABOUT SOME LETTERS TO THE EDITOR? Jules

NEWSLETTER CONTRIBUTORS

P. Doughty	M.Durholz
The Fishers	D.Guess, Jr.
A.Pollock	J.Rottman

1984 MEETING/NEWSLETTER DEADLINE

July	14th	-------
August	11th	July 21
September	8th	Aug 18
October	13th	Sep 22
November	10th	Oct 20
December	8th	Nov 17

SUBMIT ALL NEWSLETTER MATERIAL DIRECT TO JULES GESANG,BOX 452 RANDALLSTOWN,MD 21133 TO ARRIVE NO LATER THAN DEADLINE.

from Pg 1

The latest in the MODEM field is at BYTE-BACK. Jerry says he should be able to start delivery of the MD-68 Modem for the TS2068 by the end of the Month. That is for the TS2068 and TS1000 combination. The latest from WESTRIDGE is that they hope to have the SMART II software shortly. Several artices have appeared in various publications about the SURVIVORS in the TIMEX field. Last month SYNTAX ran a page of peripheral manufacturers that were continuing to carry on. We are submitting this month the names of NEWSLETTERS dedicated to TIMEX that are still with us.

**SYNTAX.Still publishing each month. Monthly. $48 yr.

***SYNCWARE NEWS. Recently taken over by Tom Woods as the New Publisher. Each issue 30 to 40 pages. Vol. 1 No.3 was 52 pages. Published Bi-Monthly $16.95 year.

***TS HORIZONS. Published 12 times a year. Great up and coming newspaper. $12 per year.

***COMPUTER TRADER MAGAZINE. So full of information about all kinds of computers. $15 for 12 issues.

***COMPUTER SHOPPER. Published Monthly on newsprint the same size as New York Times. Lots of news and advertisig. See TIMEX column. 12 issues for $15. A bargain at twice the PRICE.

Next month we will continue with other NEWSLETTERS.

In the magazine field we have a new one that is catering to TIMEX. It is K POWER. See excerpt from MAY 1984 issue on page 7. In addition FAMILY COMPUTING is continuing to run programs for both the 1000 and 2068. I hear from the grapevine that we will have a guest speaker this month on FORTH. We have several articles that will be run in the next few issues. If you write to the EDITOR he would know what you want to see in these pages. We again had contibutionsof Newsletter material from out of state. How about some HOME GROWN material?

PRESIDENT`S CORNER

Well, the July meeting was well attended. We heard from the active commitees - applications, machine code, and resources - and got an update on the industry side of the coin from Jules. We had a longish break, so that people could get together and talk, and I ended the meeting with a short talk on the 2068`s display file. As we were packing up, I was surprised to notice one of the members had brought an Olivetti ink-jet printer.

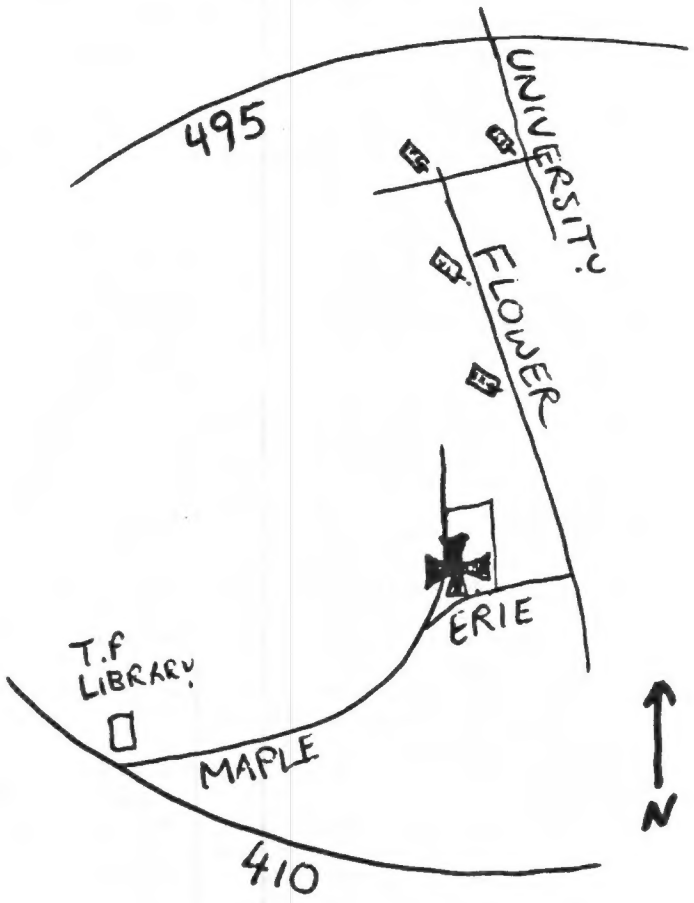
If you`ve got something new, share it with the rest of us! The best way to do that is to let me know what you`ve got at the start of the meeting; we`ll work it in somehow. If you need handouts for your presentation, call me the week before the meeting, and we`ll work something out.

I`ve been encouraged by our steady attendance at meetings. It shows that CATS is doing something for the members. If you are one of those that`s not showing up, let me know what you`d like to see change. This setup isn`t fixed in granite - there`s no law that tells us what we must do. The activities that are currently going on are the results of ten people`s ideas. There are a lot more members than that - let`s hear your ideas.

For the next meeting, we`ll have a demo of that printer, as well as sundry other tidbits. Followed by: A pot-luck dinner/housewarming at my house, after the meeting on August 11, from 6:00 to 10:00.The address is 700 Erie Ave, Takoma Park, MD - see the map nearby. The essence of a pot-luck is that it`s unpredictable, so bring what you think we`ll need. If you`re uncomfortable with that idea, call me at 589-7407 and we`ll tell you what sort of things are needed. You might try using this program to help you decide:

```
10 DIM T$(6,15)
20 LET T$(1)="SALAD"
30 LET T$(2)="SNACKS"
40 LET T$(3)="DRINKS"
50 LET T$(4)="MAIN COURSE"
60 LET T$(5)="DESSERT"
70 LET T$(6)="PLATES, CUPS +
NAPKINS"
80 RAND 0
90 PRINT "BRING
";T$(INT(RND*6+1)).
```

Mark Fisher



MEMORY YOU CAN BANK ON

Last month I discussed the differences between 8-, 16-, and 32-bit processors. This subject came about from some discussions we had here on the editorial staff. During these talks, I happened to say that last month's column was not quite true since only "names" were used.

Now, I would like to explain what I meant and also introduce the computer newcomer to a subject called "memory bank switching".

It seems that, once we identify something and give it a "name", that name sticks for all time. For example, in microcomputers we have an address bus, a data bus, and a control bus.

Because "that is what it is," some people claim the address bus should be used only for addresses, the data bus only for data, and the control bus only for control signals. However, that is not quite true. As the Queen of Hearts says in *Alice in Wonderland*, "a thing is what I say it is." Or, as Gertrude Stein said, "Rose is a rose is a rose is a rose."

When you read the specs on a processor, you will find one that says since the particular processor has 16 address lines, it can directly communicate with up to 65,536 bytes of memory (usually called "64K" or a full house).

Then you read an advertisement about a computer using the same processor and note that this particular system's claim to fame is that it can address a few hundred thousand bytes of memory.

What is even more interesting is that an 8-bit processor like the Z80 although having only 16 address lines can address up to 16 megabytes (yes, 16 megabytes) of memory.

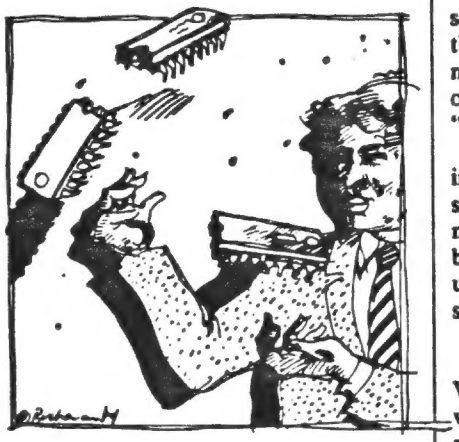
This is where the questions start to fly. "How can this be? Who is right, and what the heck is going on around here?"

Well, the spec sheet, advertisement, and claim are all telling the truth despite the apparent conflict. The spec sheet uses "direct" memory addressing, while the machine discussed in the ad and the claim uses what is called "bank switching" of memory.

In direct memory addressing, the processor uses all its address lines, which in the case of 16 lines means directly addressing one "bank" of 65,536 bytes.

Bank switching means that more than one 64K "bank" of memory can be connected to the computer, with only one bank accessed at any one time. The computer never "sees" more than 64K bytes.

This is possible because microprocessors based on grandfather 8080 (Z80, 8085, 8088, etc.) also use their 8 data lines to communicate with up to 256 I/O ports none of which occupy any memory space. This is not the same as "memory mapped I/O" as used in other processors where memory addresses themselves are used for I/O ports.



This brings up the "names" thing. Is a data line only a data line when it is carrying data and an address line an address line only when it is carrying an address? What do you call data lines and/or address lines when they are carrying I/O instructions?

Some processors use some of the address lines to carry data signals during certain times. Now what do you call these lines?

Some processors have only 8 address lines (the 1802 for example). To address the specified 64K of memory, the 1802 first loads the high order address bits into a latch, then when the low order address bits come out of the processor (on the same pins), the latch fires; and, *voila*, there are 16 address lines as if by magic. This is called "multiplexing".

By using just the lines coming from the chip, the 8080 types of processors can utilize the 16 address lines—capable of addressing 65,536 bytes of memory, and the 256 I/O ports (carried on the 8 data lines), with each port "calling" one 64K page of memory, to address up to 16,777,216 bytes of memory (65,536 × 256).

Now, instead of the 16 address lines usually specified, a simple 8080 (and family) processor can have up to 24 "address" lines, without bothering its 8 data lines. This flipping back and forth between "pages" of memory is called "bank switching."

To perform such bank switching, the software must be arranged so that, when the program needs more memory, a signal is sent to the particular bank switch output port to select the desired 64K "page."

Obviously, you can use bank switching and as much RAM as your power supply can cope with. Although each major bank of memory will fall at 64K boundaries, internal switching can be used to select memory blocks within any selected 64K page.

Cassette Storage

While on the subject of memory, if you want to find out how much data you can put on a cassette, all you have to do is use the equation $(B \times S)/8 =$ kilobytes where B is the baud rate of the cassette output port (available from the computer manual) and S is the length of the tape in seconds (e.g., a 10 minute tape is 600 seconds, etc.).

There are two things to keep in mind. One is that the length of actual usable tape is less than the total length of the tape to account for gaps between programs, computer lead-tone requirements, and other formatting needs. The other is that some cassettes are not as long (per side) as they are labelled.

As another example, assume 250 baud and a 20-minute tape. This comes out to (250 x 1200)/8 or 37.5 kilobytes. For an Apple II having a 1200-baud cassette port, a 20-minute tape produces 180 kilobytes, a 30-minute is 270 kilobytes, etc. ◇

Compuserve Page EMA-5
26-Jun-84 21:15 Fr 74216,1245
Welcome to the Sinclair Information Network newsletter. If this is the first newsletter that You have received, Please take a moment and send me EMAIL telling me what equipment you have and use, or don't use, and where you are located. We will be passing along news about all Sinclair computers, and answering your questions./1-The SPECTRUM EMULATOR is now available from the TRIANGLE SINCLAIR USERS GROUP in NC. This device confuses the T2068 into thinking that it is a ZX SPECTRUM (the U.K. "mother" of the TS2068), and allows it to utilize the thousands of software packages available for the Spectrum. The cost is $60, and you can order it by sending a check to the TRIANGLE SINCLAIR USERS GROUP c/o Douglas Dewey, 206 James Stret, Carrboro, NC 27510.

2-The most asked question along the network has been about improved terminal software. Westridge will release a SMART II Program in the future, but no date has been set. If you k now of any, let us know.

3-We need our own FORUM (SIG) in Compuserve. In Feedback, request that one be assigned to u s.

4-Don't forget to read my TIMEX SINCLAIR column each month in COMPUTER SHOPPER. I look forward to your input. Are there any BBSs in your area that are dedicated to Sinclair, or has a Sinclair subboard? Let us pass it on. If there is, you can be a local SIN coordinator. Write for details. /Mark L. Fend rick
National SIN coordinator

SINCLAIR INFO NETWORK news-

E-MAIL sent to Maddi Durholz; Any member of COMPUSERVE may reply to Mark Fendrick direct at 74216,1245.

MARYLAND BASED BULLETIN BOARDS

The following is a continuing list of Bulletin Boards located in the Maryland Area.

We will bring you such a list monthly for Maryland, D.C. and Northern Va.

If you make use of this list we ask that you advise the editor of any numbers that are no longer in use and new numbers that you find.

Annapolis	301*267-4930
Annapolis	301*267-7666
Baltimore	301*661-2175
Beltsville	301*937-4339
Beltsville	301*344-9156
Bethesda	301*460-0538
Cambridge	301*228-4621
Ellicott City	301*465-3176
Frederick	301*371-6271
Gaithersburg	301*948-5718
Gaithersburg	301*251-6293
Gaithersburg	301*948-9143
Glen Burnie	301*768-1499
Laurel	301*953-3753
Mt. Airy	301*865-5025
Pikesville	301*653-3413
Pikesville	301*484-2831
Potomac	301*424-5817
Rockville	301*949-8848
Silver Spring	301*593-7033

ANATOMY OF A MODEM

Throughout the communications software buyer's guide, constant reference has been made to the modem. This has made it clear that a modem is an essential piece of equipment; here's what a modem is, and what it does, in more technical terms.

The plain and simple fact is that unless you're a Ham radio operator or will spend many thousands of dollars for data communications, you're going to communicate over the in-place telephone network. A modem must then provide the connection to that network.

While you can transmit computer-compatible signals over wires, over long distances it gets very expensive. So most personal computer communications take place over the phone voice network. Computer-compatible signals are not voice signals, so must be converted for transmission.

A modem accomplishes the conversion by taking the computer's output, in the form of electrical impulses that represent ones and zeros, or "ons and offs," and changing them into audio signals that can be transmitted over voice lines. At the other end of the connection, another modem reads the tones from the telephone line and converts them back into binary signals.

In actual practice, a continuous audio signal, called a carrier, is changed abruptly in pitch, so that the changes represent the presence or absence of data. The changing of this carrier is called modulation. Demodulation, at the other end, is the removal of the audio signal, which exposes the original digital impulses that the computer can understand. The term, modem, comes from combining the first few letters of modulation and demodulation.

Modulation and demodulation operate under standards that were developed by the telephone company. The most popular modems today follow the Bell 103 standard which sets the method of modulation and the speed of transmission, along with other parameters. Bell 103-compatible modems can communicate at 110 or 300 baud. Baud rate is a measure of communication speed: Three-hundred baud equates roughly to 10 characters per second. As the cost of electronics decreases, more modems are becoming available that use the Bell 202 or 212 standard. These modems communicate at speeds of up to 1200 baud, or at about 40 characters per second.

There are a number of modem manufacturers serving the small-computer communications market. Their products can be classified in a number of ways, which introduces some confusion. There are direct-connect and acoustically-coupled modems. The former connect directly to the telephone line, as the name implies, while the latter connect by contact with a standard telephone handset.

Direct-connect modems can have automatic dialing and answering capability. That is, they can initiate the tones or pulses required to dial another telephone and recognize when that phone has answered (auto-dial modems); auto-answer modems can detect an incoming call on the telephone line to which they are connected, and complete the telephone circuit automatically.

Many modems available today have additional capabilities. For example, some can store lists of telephone numbers or complex log-on sequences. Some feature an automatic redial of busy numbers. To most effectively control these features, you need communications software.

A modem may not be the only piece of hardware you need for data communications, however. Some modems come complete with an RS-232 interface, the most common form of small-computer connection, while others don't. You may need to purchase such an interface, also called a serial port, so your modem can connect to your computer. If you do need to get a serial port, make sure to also get the cable that connects the port to the modem. Such cables follow an interconnect standard only loosely; getting the interface and the cable at the same time and place is one way to reduce the possibility of interconnect problems.

Manimation

Animation for the Timex

K-POWER

By Donald Guess, Jr.

If you've ever tried to do computer animation in BASIC by drawing an image on the screen, erasing it, then drawing a slightly different image in its place, you know the results aren't great.

Even the most lightning-fast interpreted BASIC can't draw and erase a series of pictures fast enough to look like smooth motion. (The speed needed can range from 15–30 draws per second.) Superfast machine-code drawing routines (Apple shape-table graphics, for example) also can't move fast enough. But there are several ways to do computer animation effectively, even with BASIC. All of these methods use hardware functions to rapidly alter preformed images on the computer screen. This way, you don't have to draw each image separately while the animation is in progress.

Using character graphics—graphics that use the character set and display functions of your computer and BASIC—is one way to do it. This month's Pixel That! shows several techniques for doing character graphics animation on the new Timex 2068 computer. But even if you don't own a TS 2068, you can adapt the techniques shown here for your computer.

The first program, *Big Flap*, shows how you can do simple animation using the 2068's built-in graphics characters, plus a little string manipulation. A character array is dimensioned to contain 130 rows of five characters each. This array is then divided into 26 "frames" that are each five rows deep by five characters wide. Graphics characters are placed in these frames to look like a bat in flight.

When these frames are rapidly printed on top of each other in the same location (see lines 90–110), the effect is dramatic. The program is designed so that if you hold down any key, you can see the animation at full speed. Hands off the keyboard makes things move more slowly, letting you see each "frame" of the animation separately.

Built-in block graphics let you do some nice tricks, but they limit the amount of detail you can put in the things you animate. The 2068 offers a way around this by letting you define new character forms. This is done by bit-mapping, discussed in Pixel That! in the February 1984 issue (*see "Roving Cupid," p. 48*). Bit-mapped characters are actually tiny, fully formed pictures made up of zeros and ones of a series of binary bytes.

In the 2068, graphics characters "A–U" can be customized. Bitmaps for these characters (eight bytes per character) are contained in RAM at the address stored at system variable UDG at 23675 decimal.

Redefining graphic characters by POKEing new values into their bitmaps lets you create a small library of custom shapes. These can be displayed almost immediately in any location by a simple PRINT statement.

TIMEX SINCLAIR/*BIG FLAP*

2068 • 48K RAM

```
10 DIM B$(130,5): LET C=0
20 FOR X=0 TO 11: READ A$
30 FOR Y=1 TO LEN A$
40 LET I=INT (C/5)+1: LET J=C-I*5+6
50 IF A$(Y)="R" THEN LET C=C+4: GO TO 80
60 IF A$(Y)="Q" THEN GO TO 80
70 LET B$(I,J)=CHR$ (CODE A$(Y)+63)
80 LET C=C+1: NEXT Y: NEXT X
90 FOR I=1 TO 126 STEP 5
100 IF INKEY$="" THEN PAUSE 20
110 FOR J=0 TO 4: PRINT AT 7+J,14;B$(I+J): NEXT J:
NEXT I: GO TO 90
1000 DATA "QFAKQQFAKQQQPQGRRQGQJQQFQKQQQPQQ"
1010 DATA "RRBIQECQFQKQQQPQQRRMQQQMQGQJQQQP"
1020 DATA "QQRRRDGQJDQQPQQRRRMMQMMQQPQQRRRR"
1030 DATA "DDPDDRRRRMMPMMRRRREMPMICQQQBRRRQ"
1040 DATA "MPMQJQQQGRRRQEPIQECQBICQQQBRRQQP"
1050 DATA "QQQJQGQJQQQGRRQQPQQQJQGQFQQQKRRQ"
1060 DATA "QPQQQJQGQQKQFQRRQQPQQQFQKQQFQKQR"
1070 DATA "RQMPMQQGQJQRRRQLPHAQCQBQRRQIQEQQ"
1080 DATA "LPHQRRRQQQNQQCPBARRRQPQPQAAPAARR"
1090 DATA "REHQLIQQPQQRRRBHQLCQQPQQRRQMQMQQ"
1100 DATA "FQKQAAPAARRQGQJQQFQKQQQPQQRRQFQK"
1110 DATA "QQFQKQQQPQQRRQEDIQQFQKQQQPQQRR"
```

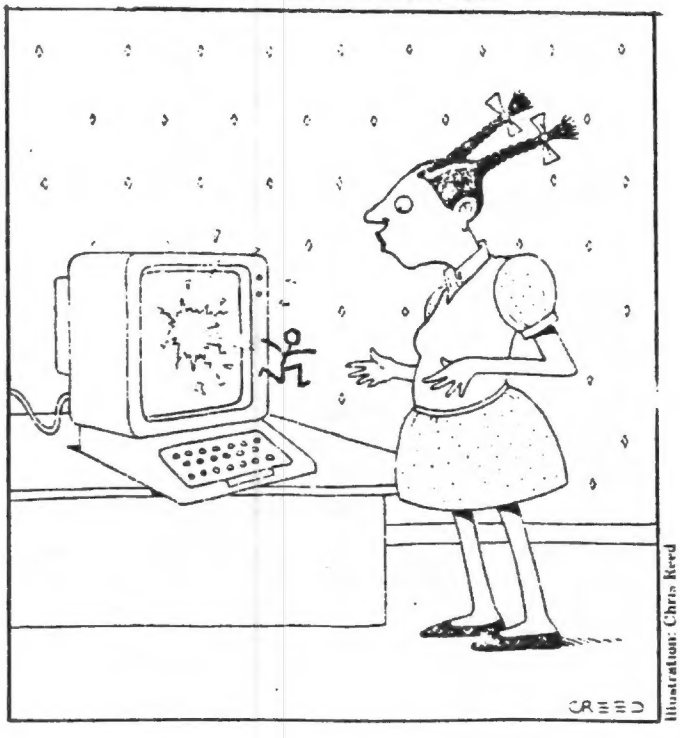


Illustration: Chris Reed

```
  1 REM  CHIMES
  5 LET N=4
 10 DIM S(2)
 15 CLS
 20 LET S(1)=5E5
 30 LET S(2)=3.3E5
 35 PRINT AT 0,22;  WIND
 37 PRINT AT 1,22;  CHIMES
 40 PRINT AT 0,0;"MATERIAL?"
 50 PRINT "1. ALUM/STEEL/GLASS"
 60 PRINT "2. BRASS/COPPER"
 70 INPUT M
 80 PRINT AT M,0;"▶";AT N,0;
 90 PRINT "SHAPE?"
100 PRINT "1. CIRCULAR (ROD)"
110 PRINT "2. RECTANGULAR (BAR)
"
120 PRINT "3. CYLINDRICAL"
130 INPUT S
140 PRINT AT S+N,0;"▶";AT 9,0;
150 IF S<>2 THEN PRINT "DIAMETE
R? ";
160 IF S=2 THEN PRINT "THICKNES
S OF BAR? ";
170 INPUT D
180 PRINT TAB 18;D;" INCHES"
190 LET K=D/4*2.54
200 IF S=1 THEN GOTO 270
210 LET K=D/SQR 12*2.54
220 IF S=2 THEN GOTO 270
230 PRINT "WALL THICKNESS? ";
240 INPUT T
250 PRINT TAB 18;T;" INCHES"
260 LET K=SQR (D*D+(D-T)*(D-T))
/4*2.54
270 LET P$="
            "
300 PRINT AT 12,0;"NO.  FREQ.
LENGTH      DRILL AT"
310 LET C=13
320 PRINT AT C,0,C-12
330 PRINT AT 21,0;"ENTER FREQ.
OR (C)OPY OR (R)UN"
340 INPUT F$
350 IF CODE F$=40 THEN GOTO 800
355 IF CODE F$=55 THEN RUN
360 LET F=VAL F$
370 LET L=SQR (1.133*PI*K*S(M)/
F)/2.54
375 LET F=INT (F+.5)
380 LET L=(INT (L*100))/100
390 LET DA=(INT (L*22.42))/100
400 PRINT AT C,6;F;TAB 13;L;TAB
28;DA
405 GOSUB 1000
410 LET C=C+1
420 IF C=21 THEN GOTO 700
430 GOTO 320
700 PRINT AT 21,0;"(C)OPY OR (E
NTER) TO RUN AGAIN"
710 IF INKEY$="" THEN GOTO 710
720 IF INKEY$="C" THEN GOTO 850
730 IF INKEY$=CHR$ 118 THEN RUN

740 GOTO 710
800 PRINT AT C,0;P$;AT 21,0;P$
810 COPY
820 GOTO 320
850 PRINT AT 21,0;P$
860 COPY
870 GOTO 700
900 SAVE "CHIMES"
910 RUN
1000 LET LC=INT (L/2)
1005 IF LC>13 THEN LET LC=LC/2
1007 IF LC>13 THEN GOTO 1005
1010 LET CC=0
1020 FOR P=39 TO (39-LC) STEP -1
1030 PLOT (C*2+20),P
1040 NEXT P
1050 RETURN
```

```
MATERIAL?
▶. ALUM/STEEL/GLASS
2. BRASS/COPPER

SHAPE?
1. CIRCULAR (ROD)
2. RECTANGULAR (BAR)
▶. CYLINDRICAL

DIAMETER?              0.71875 INCHES
WALL THICKNESS?     .046875 INCHES

NO.   FREQ.    LENGTH      DRILL AT
1       523     18.15          4.06
2       588     17.11          3.83
3       651     16.23          3.63
4       785     14.82          3.32
5       872     14.06          3.15
6      1046     12.83          2.87
```

SCREENSTRINGS FOR ZX81, TS 1000

THIS SIMPLE ROUTINE MAY BE ADDED TO ANY OF YOUR EXISTING PROGRAMS AND USED TO CONVERT A FULL SCREEN OF OUTPUT TO A LONG STRING (704 CHARACTERS) WHICH MAY THEN BE PRINTED WITH GREAT SPEED. YOU MAY WISH TO STORE SEVERAL SCREENSTR$ AND PRINT THEM IN SUCCESSION TO CREATE ANIMATION. TO DO THIS, YOU WILL HAVE TO CHANGE THE NAME OF THE STRING EACH TIME YOU WISH TO CREATE A NEW ONE.

ALWAYS USE GOTO, NEVER RUN, OR YOU WILL WIPE OUT YOUR WORK.

THE LINE NUMBERING USED HERE IS ARBITRARY... RENUMBER AS SUITS YOUR NEEDS.

PHIL DOUGHTY, OF VIDIOM
PO BOX 3118, PROVIDENCE,RI 02906

```
 999 REM >>> CREATES A SCREENSTR
$FROM D-FILE
1000 DIM S$(704)
1010 LET DF=PEEK 16396+256*PEEK
16397
1020 LET A=DF+1
1030 FOR I=1 TO 704
1040 IF PEEK A=118 THEN LET A=A+
1
1050 IF PEEK A<>118 THEN LET S$(
I)=CHR$ PEEK A
1060 LET A=A+1
1070 NEXT I
```

SOFTWARE IMPRESSIONS

by ALAN POLLOCK

PROGRAM: TS ATOR-THE ABC GATOR
by Kuever, Ostrand
MACHINE: TS 1000 - 16K
AGE: 2 through 6
LOAD TIME: Part 1-6:28, Part 2-5:43
SOLD BY: Gesang Associates, Box 452
Randallstown, Md. 21133
301-922-0767
PRICE: $5 to $8

This is what having a TS1000 is all about.

A well thought-out compact program that does what it's supposed to, on an inexpensive computer.

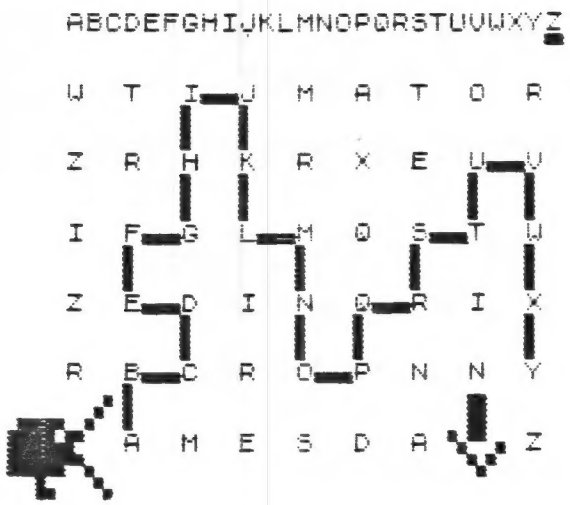
Instead of watching re-runs of Family Feud or Mork and Mindy, spend some time with the young ones and load this educational program.

It seems so simple to us - the Alphabet. Why use a computer ? Because the learning process has numerous approaches and what ever works - works ! We take many paths to the mountaintop.

"ATOR" teaches, reinforces and delights the intended audience.

The program has two parts. After the first section is loaded, you sync the screen to the audio cassette and your children revel in listening to an alphabet song while watching each huge letter flash in time to the music and words. The alphabet sequence repeats for reinforcement and then tells you to load the next section for two game excercises: "Swamp Fever" and "Lost in the Swamp".

In Swamp Fever the alligator will jump all over the swamp, eating the letters of the alphabet that appear in order if the child presses the correct letter on the key board. After "Z" the exercise finishes with an alphabet graphic and a big picture of the alligator.

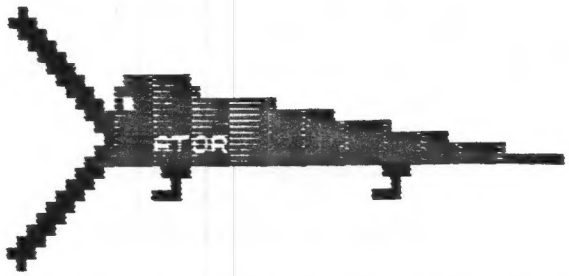


"Lost in the Swamp" is a beginning maze game, with a screen full of random letters with the alligator at one side and his home on the other. The object is to connect the letters of the alphabet in sequence in order to draw a path for the alligator to find his way home. The child uses the arrow keys to draw the path between letters. After "Z" the unused letters disappear leaving a clear path. "ATOR" promptly eats the path up to get home, followed by the same ending display of "Swamp Fever".

This is chunky graphics, no color, no sound, elementary movement, but...the children could care less. They learn and they have a good time.

Uncle Clive would smile about his much maligned membrane key board if he could watch my two-and-a-half year old pressing the letters with his sticky red lollypop (sugarless).

The program should be viewed as another learning tool to be used, when appropriate, by the parent.



PRESS "S" TO PLAY "SWAMP FEVER,"
OR "L" TO PLAY
"LOST IN THE SWAMP."

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BOOK REVIEW...ALMOST

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by Alan Pollock

TANTALIZING GAMES FOR THE TIMEX/SINCLAIR 2000 SERIES
by Hal Renko/Sam Edwards

Addison-Wesley Publishing Co.
Redding, Mass. 01867

Price: Under $5

I'd like to say that for under 5 dollars this is a smart purchase. I wanted to say that this book of 30 games gives the beginner a good break from serious computer study to have some fun while learning to type in a program.

I can't.

Renko and Edwards must have wanted to beat Steven Spielberg into print with a story about GREMLINS !!!

Won't publishers ever learn that the most frustrating and confidence-destroying computer procedure is to punch in a program and not have it run. Right away you think the problem is you, not the book. In this case it's the book.

I stopped after carefully trying 7 or 8 games. A couple ran but mostly "variable not found" showed up. For the novice, it's not worth it.

Those of you who already have the book, please note: The U.S. publisher is aware of the problems and is contacting the authors for corrected print-outs. They have made a smart PR move by offering anyone who writes a letter of request, new print-outs of any game that is bugged. I suggest you ask for a print-out for all games. Pencils ready ? Here's where to write:

TO: Ms. Jane Tamlyn
Microcomputer Division
ADDISON-WESLEY Publishing Co.
Redding, Mass. 01867

Book #16479 Ph:617-944-3700

```
   5 REM Piano Fun! By Jeff Rott
man
   7 BORDER 3: PRINT AT 11,10; F
LASH 1;"STOP THE TAPE": BEEP 1,-
5: PAUSE 100: CLS
   8 PRINT AT 3,8;"READY TO PLAY
"
  10 SOUND 7,56
  20 IF INKEY$="q" THEN SOUND 0,
68;1,3;8,16;11,50;12,50;13,9: PR
INT AT 10,15;"C "
  30 IF INKEY$="2" THEN SOUND 0,
21;1,3;8,16;11,50;12,50;13,9: PR
INT AT 10,15;"C#"
  40 IF INKEY$="w" THEN SOUND 0,
232;1,2;8,16;11,50;12,50;13,9: P
RINT AT 10,15;"D "
  50 IF INKEY$="3" THEN SOUND 0,
191;1,2;8,16;11,50;12,50;13,9: P
RINT AT 10,15;"D#"
  60 IF INKEY$="e" THEN SOUND 0,
151;1,2;8,15;11,50;12,50;13,9: P
RINT AT 10,15;"E "
  70 IF INKEY$="r" THEN SOUND 0,
114;1,2;8,15;11,50;12,50;13,9: P
RINT AT 10,15;"F "
  80 IF INKEY$="5" THEN SOUND 0,
79;1,2;8,16;11,50;12,50;13,9: PR
INT AT 10,15;"F#"
  90 IF INKEY$="t" THEN SOUND 0,
46;1,2;8,16;11,50;12,50;13,9: PR
INT AT 10,15;"G "
 100 IF INKEY$="6" THEN SOUND 0,
14;1,2;8,16;11,50;12,50;13,9: PR
INT AT 10,15;"G#"
 110 IF INKEY$="y" THEN SOUND 0,
241;1,1;8,16;11,50;12,50;13,9: P
RINT AT 10,15;"A "
 120 IF INKEY$="7" THEN SOUND 0,
213;1,1;8,16;11,50;12,50;13,9: P
RINT AT 10,15;"A#"
 130 IF INKEY$="u" THEN SOUND 0,
186;1,1;8,16;11,50;12,50;13,9: P
RINT AT 10,15;"B "
 140 IF INKEY$="i" THEN SOUND 0,
162;1,1;8,16;11,50;12,50;13,9: P
RINT AT 10,15;"C "
 210 GO TO 10
 220 SAVE "Piano" LINE 7
```

Capitol Area Timex/Sinclair Users' Group
P.O.Box 725
Bladensburg, MD 20710

August 1984

Name _____

Address _____

_____ ZIP _____

Phone Home _____ Office _____

Memberships - $12.00 (family/individual);make checks payable to C.A.T.S.

If family membership, please list family members participating:

_____

Occupation _____

Ham Radio call sign _____

Equipment

ZX 80 _____ RAM size _____

MA 80 _____ full keyboard _____

ZX 81 _____ Printer _____

TS 1000 _____ type _____

TS 2000 _____ other interface _____

Special interest use for computer: ie, games, ham radio interface, business, other, etc. _____

_____

Languages: Basic _____ Other _____

Machine _____ _____

No. of years computer experience _____

What committees would you like to serve on? _____

_____

Comments: tell us how you heard about C.A.T.S.

_____

- -

Do not write below:

Dt. Pd. _____ Amt. _____ Membership No. _____

Ck. _____ Ck. _____

The mailing address of the Capitol Area Timex/Sinclair User's Group is:

Capitol Area Timex/Sinclair User's group
P.O. Box 725
Bladensburg, MD 20710

CATS is a non-profit special interest organization dedicated to serving the interests of those who own, use, or are interested in learning more about the Timex/Sinclair family of personal computers.

The official contact person for CATS is JULES GESANG:

301*922-0767

Meetings are held on the second Saturday of each month at 2 P.M. in the large meeting room of the New Carrollton Branch Public Library.

Ham Radio Network Information
QZX Net...Wednesdays, 9p.m. local time; 14.345 MHz NVAF NCS
Eastern Regional Sinclair Net...Sundays, 1600 Z; 7.245 MHz
K02F NCS

CATS Newsletter
P.O. Box 725
Bladensburg MD 20710

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Next CATS Meeting ++ 2 P.M.

Saturday, August 11

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7414 Riverdale Road, New Carrolton, MD

IF YOU ARE NOT A MEMBER OF CATS, THIS IS THE ONLY ISSUE YOU WILL RECIEVE
Dues = $12 per year, per family.

DATED MATERIAL